CLAIMS:

405

410

415

420

1. A support assembly for an item of furniture, which support assembly 400 includes:

an elongated support structure for connection at an operatively upper end thereof to an upper portion of an item of furniture, the support structure having a first pair of feet at or adjacent an operatively lower end thereof;

an elongated guide formation fast with the support structure and extending lengthwise relative to the support structure;

a displaceable support member which has a second pair of feet at or adjacent an operatively lower end thereof, the displaceable support member being arranged relative to the support structure so that a line drawn between the feet of the first pair is transverse to a line drawn between the feet of the second pair, the displaceable support member also being provided with an elongated guided formation complementary to and longitudinally slidably engaged with the guide formation, so that the displaceable support member is slidably displaceable along a rectilinear guide path which is transverse to the lines drawn between both the pairs of feet, with one of the guide formation and the guided formation being in the form of a guide pin, the other one of the guide formation and the guided formation being in the form of a housing defining a guide passage within which the guide pin is longitudinally slidably received, the housing being constructed such that a cross-sectional area of the guide passage is adjustable, to permit dimensioning of the guide passage relative to the guide pin such that automatic frictional engagement of the guide pin with walls of the housing defining the guide passage occurs in response to pivoting of the displaceable support member about a pivot axis which is transverse to the displaceable support member's guide path, to anchor the

displaceable support member frictionally against sliding displacement relative to the support structure.

- The support assembly as claimed in Claim 1, in which the housing is provided with a longitudinally extending slit and with an adjustment arrangement for adjusting the width of the slit, to permit said adjustability of the cross-sectional area of the guide passage.
- 3. The support assembly as claimed in Claim 2, in which the adjustment arrangement comprises two passage defining formations and a bolt-and-nut assembly, one passage defining formation being located on each side of the slit, the passages defined by the formations being substantially aligned and extending transverse relative to a longitudinal axis of the guide passage, with the bolt of the assembly being received in and extending through the passages, such that the passage defining formations are held captive between the head of the bolt and the nut of the assembly, and adjustment of the width of the slit is effected by threading of the nut on the bolt.
- 4. The support assembly as claimed in Claim 3, in which the guide passage 440 is of circular cross-section, the guide pin being circular cylindrical.
 - 5. The support assembly as claimed in Claim 4, in which the guide formation is constituted by the guide pin, the guide pin projecting operatively downwardly from the operatively lower end of the support structure, and the guided formation being constituted by the guide passage defined by the housing, with the housing being centrally located with respect to the displaceable support member.

19

6. The support assembly as claimed in Claim 5, in which the support structure comprises an elongated operatively upright post and a spider formation connected to an operatively lower end of the post, the spider formation comprising four radially outwardly projecting spokes which are equiangularly spaced about a longitudinal axis of the post, each spoke being channel-shaped and opening operatively downwardly, with the guide pin engaging the spider formation and projecting centrally operatively downwardly therefrom.

455

450

- 7. The support assembly as claimed in Claim 6, in which one pair of aligned spokes is provided with the first pair of feet, the feet of the first pair respectively being provided at ends of the spokes of said one pair of spokes.
- The support assembly as claimed in Claim 7, in which the displaceable support member comprises an arm which is received in the channel defined by the other pair of aligned spokes and extending lengthwise therealong, the feet of the second pair of feet respectively being provided at the ends of the arm.
- 465 9. The support assembly as claimed in Claim 8, in which the arm and the housing are integrally formed.
 - 10. The support assembly as claimed in Claim 9, which includes at least one urging member urging the arm operatively downwardly away from the support structure.

470

11. The support assembly as claimed in Claim 10, which includes two urging members which are equally spaced on opposite sides of the guide formation, each

WO 2005/034680

urging member being in the form of a compressed spring located in the channel defined by said other pair of spokes and acting between the spokes and the arm.

475

12. The support assembly as claimed in any one of Claim 6 to Claim 11 inclusive, which includes a securing formation fast with an operatively lower end of the guide pin, which securing formation together with the spider formation holds the housing captive on the guide pin.

480

- 13. The support assembly as claimed in any one of the preceding claims, in which the feet of the second pair are spaced at equal distances from a longitudinal axis of the guide formation.
- The support assembly as claimed in Claim 13, in which the feet of the first pair are spaced the same distance from a longitudinal axis of the guide formation as the feet of the second pair are spaced from the longitudinal axis of the guide formation.
- The support assembly as claimed in any one of the preceding claims in which the line drawn between the first pair of feet and the line drawn between the second pair of feet are at right angles to each other.
 - 16. The support assembly as claimed in any one of the preceding claims, which includes sealing means sealing the guide pin off from the environment.

495

17. A self-stabilizing arrangement for an item of furniture, which arrangement includes:

500

505

510

515

520

an elongated first support component having at each end a foot projecting in the same direction;

an elongated guide formation fast with the first support component; and

an elongated second support component having at each end a foot projecting in the same direction as the feet of the first support component, the second support component including an elongated guided formation complementary to and longitudinally slidably engaged with the guide formation, one of the guide formation and the guided formation being in the form of a guide pin, the other one of the guide formation and the guided formation being in the form of a guide passage defined by a housing fast with the associated one of the first and the second support components, within which guide passage the guide pin is longitudinally slidably received, such that the second support component is slidably displaceable relative to the first support component, with the housing being constructed such that a cross-sectional area of the guide passage is adjustable.

- 18. The self-stabilizing arrangement as claimed in Claim 17, in which the housing is provided with a longitudinally extending slit and with an adjustment arrangement for adjusting the width of the slit, to permit said adjustability of the cross-sectional are of the guide passage.
- 19. The self-stabilizing arrangement as claimed in Claim 18, in which the adjustment arrangement comprises two passage defining formations and a bolt-and-nut assembly, one passage defining formation being located on each side of the slit, the passages defined by the formations being substantially aligned and extending transverse to a longitudinal axis of the guide passage, with the bolt of the assembly being received in and extending through the passages, such that the passage defining

formations are held captive between the head of the bolt and the nut of the assembly, and adjustment of the width of the slit is effected by threading of the nut on the bolt.

- 20. The self-stabilizing arrangement as claimed in Claim 19, in which the guide formation is constituted by the guide pin, the guide pin being centrally fast with the first support component and projecting in the same direction as the feet, the guided formation being constituted by the guide passage defined by the housing, the housing being integrally formed with and centrally located with respect to the second support component.
- The self-stabilizing arrangement as claimed in Claim 20, in which the first support component and the second support component are orthogonal.
 - 22. The self-stabilizing arrangement as claimed in Claim 19 or Claim 20, which includes a locating arrangement, the locating arrangement keeping the first and the second support components in a predetermined relative configuration.

540

545

- 23. The self-stabilizing arrangement as claimed in Claim 22, in which the locating arrangement includes a pair of longitudinally aligned spokes fast with the first support component and projecting radially outwardly therefrom, such that the spokes and the first support component are orthogonal, the spokes being shaped to define a locating channel opening in the same direction as the direction in which the feet and the pin project, in which locating channel the second support component is located.
- 24. The self-stabilizing arrangement as claimed in any one of Claim 17 to Claim 23 inclusive, in which the guide formation and the guided formation are shaped

23

and dimensioned such that there is limited clearance, which clearance is adjustable on account of the adjustability of the cross-sectional area of the guide passage, between the guide pin and a wall of the housing defining the guide passage, so that automatic frictional locking of the second support component relative to the first support component occurs when a nett moment about an axis transverse to a longitudinal axis of the guide pin is exerted on the second support component.

- 25. The self-stabilizing arrangement as claimed in any one of Claim 17 to Claim 24 inclusive, which includes at least one urging member urging the second support component away from the first support component in the same direction in which the feet project.
- 26. The self-stabilizing arrangement as claimed in Claim 23, which includes two urging members which are equally spaced on opposite sides of the guide formation, each urging member being in the form of a compressed spring located in the channel defined by said other pair of spokes and acting between the spokes and the second support component.
- 27. The self-stabilizing arrangement as claimed in any one of Claim 17 to Claim 26 inclusive, which includes a securing formation for securing it, in use, to a support structure of an item of furniture.
 - 28. The self-stabilizing arrangement as claimed in any one of Claim 17 to Claim 27 inclusive, which includes sealing means sealing the guide pin off from the environment.

560

- 29. The self-stabilizing arrangement as claimed in any one of Claim 17 to Claim 28, which includes a securing formation fast with the guide pin, which securing formation serves to hold the guided formation captive on the guide pin.
- 30. An item of furniture which includes a support assembly as claimed in any one of Claim 1 to Claim 16 inclusive, and an upper portion of an item of furniture mounted on the support assembly.
- The item of furniture as claimed in Claim 30, which is a table, the upper portion of the item of furniture being a table top.
 - 32. The item of furniture as claimed in Claim 32, which is a stool or a chair, the upper portion of the item of furniture being a seat portion of the stool or chair.
- 33. An item of furniture which includes a self-stabilizing arrangement as claimed in any one of Claim 17 to Claim 29 inclusive, and an upper portion of an item of furniture fast with the first support component thereof.
- 34. An item of furniture as claimed in Claim 33, which is a table, the upper portion of the item of furniture being a table top.
 - 35. An item of furniture as claimed in Claim 34, which is a stool or a chair, the upper portion of the item of furniture being a seat portion of the stool or chair.
- 600 36. A support assembly substantially as herein described with reference to the accompanying drawings.

25

37. A self-stabilizing arrangement substantially as herein described with reference to the accompanying drawings.

605

38. An item of furniture substantially as herein described with reference to the accompanying drawings.